



FOR IMMEDIATE RELEASE

November 21, 2006

## FACT SHEET

### **CITY'S WATER AND SEWER RATES MUST INCREASE TO FUND IMPROVEMENTS REQUIRED BY COURT AND REGULATORS**

#### ***SAN DIEGO UNDER ORDERS TO IMMEDIATELY IMPROVE AGING WATER AND WASTEWATER INFRASTRUCTURE***

#### **MAYOR SET TOUGH PRE-CONDITIONS FOR CONSIDERING NEW RATES**

Mayor Jerry Sanders has announced a proposal for rate increases for the City of San Diego's water and wastewater systems.

The proposal is being made by City staff in response to state and federal mandates requiring the City to immediately upgrade its deteriorating water and sewer systems.

As proposed by staff, the new rates will allow the City to finance approximately \$600 million in critical capital improvement projects for the water system. The new rates will also allow the City to finance an additional \$650 million in projects for the wastewater system. The City will also use revenue from the new rates to refinance an existing \$150 million bank loan used to fund previous wastewater system improvements.

"We are facing the most critical moment in years for our City's water and wastewater infrastructure. Increasing regulatory demands, court decisions and years of neglect have left us with no choice but to implement a massive series of improvements for both systems. We can no longer wait or hope to avoid these requirements. We must act now."

Mayor Jerry Sanders

The staff proposal was made after nearly a year of investigations, independent financial reviews and a comprehensive analysis of management and accounting practices required by the Mayor.

The announcement of the rate proposal comes after City staff addressed a series of stringent pre-conditions set by the Mayor as a requirement for considering any new rate recommendations.

As promised at the outset of his administration, Mayor Sanders directed City staff to undertake the review efforts in response to concerns about potential mismanagement and inefficiencies in both systems. The Mayor's pre-conditions included:

- Completion of a **comprehensive examination of the budgets and rate structures** of both systems
- A review by **outside auditors** of past practices regarding the use of previous rate increases and bond proceeds by both systems
- A **detailed report** regarding whether the water or wastewater systems had raised rates for projects that have not been, or never will be, completed
- An analysis of the various **operational and capital demands** on the systems' cash flow
- A complete **accounting of any funds that have been transferred** out of these systems and for what purpose
- A study of how San Diego's **water and wastewater rates compare with surrounding agencies'**, and
- A thorough report of **what administrative expenses can be trimmed** from both systems.

Staff has provided the Mayor with the result of this review and the findings of the outside auditors as part of their recommendation for a new rate structure.

#### **STAFF WORK, AUDITS AND RESPONSES TO KROLL REPORT MEET MAYOR'S REQUIREMENTS**

Since January when the Mayor set his pre-conditions for considering recommendations for new rates, the City has received an in-depth critical evaluation of the management and accounting practices used in the water and wastewater systems.

The Kroll Report and an analysis by a team of outside accountants at Mayer, Hoffmann and McCann (MHM) led the City to improve its accounting methods for water and wastewater funds and to return more than \$1 million in inappropriate charges made to those funds by other City departments.

The MHM report showed that even with consideration for those charges that the water and wastewater systems have used ratepayer and bond proceeds appropriately. Each of the other reports and evaluations required by the Mayor concur with the MHM audit findings.

The evaluations did find that some required projects begun with funding from previous rate increases currently remain unfinished due to the City's inability to access outside financing. They also revealed that the systems' capital and operational demands are approaching their maximum and that future upgrades and improvements are contingent on new outside financing alternatives.

## **NEW RATES ALLOW CITY TO MEET COMPLIANCE ORDERS AND CONSENT DECREE**

Revenues from the new rates proposed by staff will allow the City to finance projects associated with meeting the water system's Compliance Order from the California Department of Health Services. The water system will also be able to fund projects to meet mandates under the Federal Safe Drinking Water Act that require the City to rehabilitate or replace deteriorating pipelines.

The new rates will allow the City's wastewater system to fund projects related to meeting the conditions of a Final Consent Decree issued by the Federal Court that must be signed by the City no later than June 30, 2007. That Decree will require the City to initiate a series of improvements at its pump stations and to replace miles of wastewater pipelines.

The costs for all of these required improvements have been accumulating due to the City's inability to access public finance markets to fund incremental improvements over the past few years.

### **Rate Increases Needed for Water and Wastewater Systems FY08 – FY11**

	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>
<b>Water</b>	6.50%	6.50%	6.50%	6.50%
<b>Wastewater</b>	8.75%	8.75%	7.00%	7.00%

When approved, the new wastewater rate will go into affect on May 1, 2007. Water rates would go into affect on July 1, 2007.

### **SYSTEM EFFICIENCIES AND OVERSIGHT WILL HELP TO KEEP NEW RATES IN CHECK**

The City has been able to offset a portion of these new revenue demands through increased efficiencies in the operation and maintenance of both systems over the past few years. The improved efficiencies have effectively lowered the level of potential rate increases.

As a result of these efficiency measures the wastewater system has taken more than 8% off the first year rate increase they would have otherwise needed without the new efficiencies. Improved efficiencies also helped the water system by keeping an additional 3% need off first year rate proposals. Higher rates would have also been necessary in subsequent years for both systems without their continuing efficiency measures.

At the Mayor's direction, an independent board will be appointed to oversee a new annual accounting review process to be put in place for both systems. The accounting review will be similar to the one conducted in summer of this year.

"I believe these are very important steps toward rebuilding complete trust in our water and wastewater systems. The more eyes we bring to focus on the needs, requirements and financial management of these systems the better."

Mayor Jerry Sanders

The board will meet annually to analyze the result of the review and will report their own findings to the Mayor, the City Attorney, the City Council and to the public. The review process and board's oversight will help make sure that ratepayer funds and bond proceeds are being used as they are supposed to.

### **REQUIRED IMPROVEMENTS INCLUDE WORK IN EVERY COMMUNITY**

The upgrades and improvements being proposed for the water and wastewater systems include projects in every community throughout San Diego. Each of the upgrades and improvements are associated with the Final Consent Decree, the Compliance Order, other regulatory requirements or critical operational needs for the water and wastewater systems.

Pipeline replacement and rehabilitation is one of the largest elements being recommended in the schedule of improvement efforts for both the water and wastewater systems and is planned to affect hundreds of miles of pipe over the next four years.

Major upgrades to the water treatment facilities at Otay, Alvarado and Miramar will also be undertaken. Large trunk sewers will be replaced. New water mains will also be installed to replace the crumbling cast iron mains reaching the end of their serviceable lifespan.

State and Federal regulators are also requiring the City to upgrade security systems to help ensure the safety and reliability of our water system.

### **Key Improvements Proposed For Water and Wastewater Systems (FY08 – FY11)**

<b>Wastewater</b>	<b>Water</b>
Citywide Pump Station Improvements	Citywide Cast Iron Pipe Replacement
Citywide Trunk Sewer Replacements	Citywide Pump Station Improvements
Citywide Pipeline Rehabilitation	Citywide Standpipe Improvements
Citywide Sewer Main Replacements	Citywide Service Area Improvements
Pt. Loma Wastewater Treatment Plant – Improved Technologies	Alvarado, Miramar and Otay Water Treatment Plant Technology Upgrades and Expansion
Metro Biosolids Center – Facility and Equipment Improvements	Security Upgrades for Reservoirs and Dams – Citywide
North City Water Reclamation Plant – Pump Station Upgrades	San Pasqual Groundwater Management Plan and Desalination Demonstration Project
South Bay Water Reclamation Plant – Improved Technologies	Rancho Bernardo Reservoir Rehabilitation and Piping Projects

## PUBLIC INPUT AND CITY COUNCIL APPROVAL REQUIRED FOR NEW RATES

Staff has been working with outside finance professionals and independent accountants to prepare supporting documentation for their proposed rate structure. That documentation includes comprehensive "Cost of Service Studies" that show how the City will need to allocate the rate increase among the various users of the water and wastewater systems.

Staff has also finalized a "Rate Case" that will give the public and City Council a complete account of the systems' financing needs over the next four years and beyond. At the Mayor's direction, the rate case was reviewed in advance of its release by accountants at Mayer, Hoffmann and McCann, the same firm called in to investigate earlier concerns regarding system accounting practices.

The Mayor has also directed staff to conduct a broad series of public input sessions in advance of the City Council's consideration of the new rate recommendations.

The City Council will be given all of the information and supporting documentation related to the rate increase proposal in Mid-December nearly a full month in advance of the first preliminary hearing on this issue being requested by the Mayor.

The City Council is required by state law to provide property-owners and ratepayers 45 day advance notice prior to formal consideration of any rate increases. The Mayor is requesting the Council to hold its formal hearing on the new rate proposal in late February to allow the City time to meet that notification requirement.

## CALENDAR FOR CONSIDERATION OF THE NEW RATE PROPOSAL

November 27, 2006	Town Hall Meeting at San Ysidro Multi-Cultural Center – 6 to 8 pm
November 28, 2006	Town Hall Meeting at Balboa Park War Memorial – 6 to 8 pm
November 29, 2006	Public Utility Advisory Commission Water and Wastewater Rate Sub-Committee Meetings – 9192 Topaz Way in Kearny Mesa 2 – 4 pm Public Meeting 5 – 7 pm Public Meeting 7 – 8 pm Committee Meetings
December 5, 2006	Town Hall Meeting at Rancho Bernardo Library – 6 to 8 pm
Mid-December	All Materials and Docket Package Provided to City Council
January 8, 2007	<b>Tentative</b> Date for Council Initiation of Public Notice Process
February 26, 2007	<b>Tentative</b> Date for Council's Formal Consideration of Rates
May 1, 2007	Implementation of New Wastewater Rates
July 1, 2007	Implementation of New Water Rates

# *City of San Diego, California*



## WASTEWATER COST OF SERVICE RATE STUDY FINAL DRAFT

*Prepared By*

**RFC**  
RAFTELIS FINANCIAL  
CONSULTANTS, INC.

*November 16, 2006*

## SECTION 1: EXECUTIVE SUMMARY

The City of San Diego (City) has commissioned a utility Cost of Service and Rate Design (Study) for the Metropolitan Wastewater Department (MWWD). The Study includes a thorough review of revenue requirements, cost of service allocations, and design of a system of user charges for the City's wastewater service consistent with State Water Resources Control Board (SWRCB) Revenue Guidelines and City policies. This report documents the results of the Study, updates cost of service based wastewater rates for City customers, and suggests changes to the rate structure. In addition, it reviews options for development of the monthly customer base charge. Rate changes are projected to be considered for approval by City Council and become effective for retail customers May 1, 2007.

The City provides both wholesale wastewater transportation, treatment, and disposal services to the Participating Agencies (PAs) and retail collection, transportation, treatment and disposal services to the City's users. To finance its capital program, the City uses a combination of federal grants, state loans, bonds, rates, and reserves. The federal loans and grants are generally administered by the SWRCB. As a recipient of federal grants and state loans, the City is contractually obligated to comply with the SWRCB's Revenue Program Guidelines, which requires that system users be billed for service on a basis proportionate to use.

The focus of this Study is the City's retail wastewater service. The specific objectives of the Study include:

- Review of the overall costs (revenue requirements) of providing wastewater service;
- Determination of costs of service for the City's retail customers;
  - Review of the allocation of costs to the wastewater parameters of Flow, Total Suspended Solids (TSS), and Chemical Oxygen Demand (COD);
  - Review of the allocation of parameter costs to retail customer classes;
- Development of an appropriate Single Family Residential (SFR) class sewer cap in keeping with SWRCB guidance;
- Review of the fixed base charge component of the customer monthly bill; and,
- Update of full cost recovery Capacity Fees.

The Executive Summary highlights the principal findings and recommendations of the Study. The following additional sections document the review process findings and recommendations to address the objectives of this Study.

- Section 2: Introduction;
- Section 3: Wastewater System;
- Section 4: User Classifications and Loadings;
- Section 5: Revenue Requirements;
- Section 6: Study Issues;
- Section 7: Cost Of Service;
- Section 8: Rate Design; and,
- Section 9: Capacity Fee Review.

## 1.1 Wastewater System

This section of the Executive Summary provides a brief background of the wastewater system, a review of the revenue requirements and cost of service, an evaluation of issues, and suggested changes to wastewater rates and capacity fees.

The City owns and operates a regional wastewater system that includes both the Municipal (Muni) System and Metropolitan (Metro) System. The Muni System is primarily a sewage collection system that serves the City's service area. The Metro System includes facilities which provide advanced primary treatment, secondary treatment, tertiary reclamation, sludge processing and effluent disposal. The City holds two NPDES permits for the regional system that stipulate discharge limitations: the first covering advanced primary treatment at the Point Loma Wastewater Treatment Plant; and the second covering secondary treatment at the South Bay Water Reclamation Plant. The City provides retail wastewater services through the Muni System and wholesale wastewater services to fifteen PAs pursuant to the terms of the Regional Wastewater Disposal Agreement.

## 1.2 User Classification and Loadings

In a previous Cost of Service Study the City adopted recommendations that resulted in the current system of user classifications. Residential users are similar in their strength characteristics and are, therefore, assumed to have identical TSS and COD loadings. The commercial/industrial user class varies widely based on the type of work they engage in. For the purpose of this Study it was determined that user classifications currently in place still accurately reflect conditions within the City. A more detailed discussion of User Classifications and Loadings is contained in Section 4.

## 1.3 Review of Revenue Requirements

Revenue requirements from rates are the net of all expenditures, including reserve requirements, less non-rate revenues. The City's principal sources of revenue to recover operating costs include sewer service charges paid by the City's retail users and full cost recovery from the PAs per their cost sharing agreements with the City. The primary sources of revenue to recover capital costs include sewer connection fees, capital fund balance, bond proceeds, state and federal grants and loans, capacity fees paid by City retail users and the PAs, pay-as-you-go revenues from the PAs and interest earnings.

The City's retail service area operations and maintenance (O&M) expenditures, which are the focus of this Study, are estimated to be in the range of \$208 to \$243 million per year between FY 2007 and FY 2011. Retail service area annual capital expenditures, including debt service and pay-as-you-go capital, are in the range of \$81 to \$137 million per year. Debt service constitutes the majority of capital expenditures and ranges between \$72 and \$102 million per year over that same time period.

In order to meet projected revenue requirements, including desired operating and debt service reserve fund levels, City staff proposed the following revenue adjustments, which are intended for docketing by the City Council in February 2007:

*Table ES-1 Proposed (2007) and Projected (2008-2010) Revenue Adjustments*

May 1, 2007	May 1, 2008	May 1, 2009	May 1, 2010
8.75%	8.75%	7.00%	7.00%



## **1.4 Cost of Service**

The total FY 2007 cost of service to be recovered from the City's retail user rates is estimated to be approximately \$265 million, of which \$230 million are operating costs and the remaining \$35 million are capital costs. Additional capital costs are recovered from non-rate revenue including capacity fees.

The cost of service allocations presented in this study are based on the functional-design method approved by the SWRCB. The revenue requirements are allocated to different user classes in proportion to their use of the wastewater system. As mandated by the SWRCB, functional allocations are made to flow, TSS, and COD parameters. The cost of service allocations performed for the City's retail service area users are consistent with the system-wide proportionate use approach used in allocating revenue requirements between the City and the PAs.

As part of this Study, Raftelis Financial Consultants, Inc. (RFC) also evaluated options to cost justify the base fee by allocating costs attributable to customer accounts directly to another functional parameter.

## **1.5 Rate Design**

The City's existing retail wastewater rate structure for Single Family Residential (SFR), Multi-Family Residential (MFR), and Commercial/Industrial user classes includes a fixed Base Fee and a Usage Rate. The Base Fee of \$11.32 per month is the same for all customer classes. The current Usage Rate is applied differently according to customer class:

- SFR usage is based on 100% return of minimum winter water usage and is capped at 14 hundred cubic feet (hcf) monthly. Users are billed at a rate of \$2.889 per hcf;
- MFR usage is based on 95% return of water usage and billed at a rate of \$3.721 per hcf; and
- Commercial/Industrial usage is based on a sewer return rate, the percentage of metered potable water returned to the sewer, and pollutant loadings developed for each business type according to Standard Industrial Classification (SIC) codes.

Both MFR and Commercial/Industrial class customers may have individual return rates and pollutant loadings based on monitoring performed on their wastewater discharges by the City.

As mentioned, the overall focus of this Study was the review of the cost of service rate setting methodology originally developed for the City in 2003. Generally, it was decided that system characteristics had not changed significantly since 2003 and a full review of cost allocation was not necessary at this time. The current rate structure meets regulatory guidelines and the City is satisfied with the rate structure, however, the City did want to review the effects of increasing the SFR sewer cap to conform to guidance from SWRCB personnel.

## **1.6 Study Recommendations**

This section of the Executive Summary outlines our suggestions. These suggestions impact various aspects of the wastewater rate structure and capacity fees.

### **1.6.1 Single Family Residential Sewer Cap**

RFC recommends the SFR sewer cap be increased to 20 hcf and the assumed SFR return factor be dropped from 100% to 95%. SFR customers are currently subject to a 14 hcf sewer cap based on a mass balance analysis of customer winter usage. The purpose of the sewer cap is to determine the level at

which it is assumed water usage ceases to be returned to the system as wastewater. Usage above the sewer cap is assumed to be outdoor usage for purposes such as irrigation and other outdoor uses. The prior cost of service study looked at this question and suggested that the sewer cap be raised to its current level of 14 hcf then to 16 hcf after two years later. Guidance from SWRCB personnel suggests that the sewer cap be set at a level that captures 95% of the SFR accounts. Using this SWRCB direction, the calculated sewer cap would fluctuate between 17 and 21 hcf depending on climate conditions during the winter measurement months. In order to conform to SWRCB direction, the City has performed an analysis of SFR winter usage over several years to determine where the cap would fall. In order to set a stable cap, the City has chosen to average five years of winter usage and establish 20 hcf as the proposed SFR sewer cap.

The SWRCB guidance provides some latitude to assume that users return less than 100% of water use to the sewer system as wastewater. The City's climate may justify allowing a small percentage of water use for irrigation, even during the winter. We recommend the 95% return factor used for MFR be extended to include SFR usage as well.

### 1.6.2 Rate Design Changes

RFC recommends the continued use of a rate structure that includes both, a fixed monthly base fee and a variable usage charge.

Base Fee: RFC recommends that the City continue to utilize a uniform monthly base fee for all system users. The current method for setting the base fee is appropriate under SWRCB guidance and the City may continue its use. This Study did review alternatives for development of a base fee as discussed in subsection 1.6.5.

Residential Usage Rate: RFC recommends that the City continue its existing method of computing monthly SFR wastewater charges, but with a usage cap of 20 hcf instead of the existing 14 hcf cap as discussed above. RFC also recommends revising the SFR return factor to 95% from the current 100%. A short discussion on levels of usage cap is presented in Section 6 of this report. The system mass balance analysis, which compares the actual total wastewater flow to flow implied from metered water use and return factors, indicates these adjustments to the SFR usage cap are justified. RFC recommends that the City continue its existing method of determining monthly SFR user charges based on a 30-day minimum winter water usage but apply the 95% return factor. RFC also recommends that the City continue to compute MFR wastewater usage charges based on water usage and a 95% return factor. Table ES-2 presents a summary of the Residential Rate Schedule.

*Table ES-2 Proposed Residential Rate Schedule*

Description	Usage Rate (\$/hcf of water use)	Base Fee (\$/account)
SFR Rates (1)	\$2.840	\$12.31
MFR Rates	\$3.970	\$12.31

(1) SFR rate based on a 20 hcf sewer cap

Commercial/Industrial Usage Rate: For commercial/industrial users that discharge less than 25,000 gpd of flows, RFC recommends that the City continue to charge users based on their flow and strength. The

strength and return factors for these users are based on industry standards and built into the City's database.

RFC also recommends that wastewater charges for Commercial/Industrial users discharging greater than 25,000 gpd of flow continue to be calculated individually based on measured or estimated strength. The recommended cost of service rates are shown in Table ES-3.

*Table ES-3 Proposed Commercial/Industrial Rate Schedule*

Flow (\$ per hcf of wastewater)	TSS (\$/lb)	COD (\$/lb)	Base Fee (\$/account)
\$2.975	\$0.4392	\$0.1791	\$12.31

Large Commercial/Industrial customers, contract customers, and hauled waste customers would continue to be charged on a unit cost rate in which the base fee is included in the unit rate for flow. The recommended unit cost of service rates are shown in Table ES-4.

*Table ES-3 Proposed Unit Cost Rate Schedule*

Flow (\$ per hcf of wastewater)	TSS (\$/lb)	COD (\$/lb)
\$3.074	\$0.4539	\$0.1851

### 1.6.3 Rate Impacts

The main objective of this Study is to arrive at a fair and equitable allocation of costs to all user classes and individual users in proportion to their demand for wastewater services and to comply with guidance from the SWRCB. Overall increases for all customers are driven by inflationary pressures on both utility O&M and capital costs. Modifications to the sewer rate structure result in a range of customer impacts based on user classification and usage.

The impacts discussed in this paragraph compare rates under the existing and proposed rate structure. SFR users below the existing 14 hcf cap (approximately 85% of SFR accounts) will benefit under the new rate structure with the degree of benefit varying depending on metered water usage. SFR users above the current 14 hcf cap will experience higher increases since usage up to the new 20 hcf cap will become billable. The projected bill impacts vary from decreases of 3% to increases of 33% depending on metered water usage. MFR and Commercial/Industrial accounts will experience more consistent increases in their sewer service charges due to inflationary pressures on operating and capital costs since their rate structure will not be changed.

While the recommended changes lead to increases in wastewater charges for some users and decreases for others, they ensure a fair and equitable allocation that is proportionate to use. In addition, all aspects of the Study including identification and aggregation of O&M and capital costs and the development of rate structures conform to the revenue program guidelines set forth by the SWRCB.

### 1.6.4 Capacity Fee Update

Capacity fees are one-time fees used to recover the cost of providing the system capacity required when a new user connects to the wastewater system. Examples of such costs include those related to

increasing wastewater transmission and treatment capacity in treatment plants, ocean outfalls, interceptors, pumping stations, and sewer mains.

The City currently charges \$3,710 per equivalent dwelling unit (EDU) or SFR account. The minimum capacity assigned to any sewer connection is one EDU. Qualifying low income housing is eligible for a reduced capacity fee as outlined in Water Department Instruction 55.30. MFR units having individual, City-read water meters are assigned one EDU per unit, while MFR units that share a common water meter are charged based on a density-adjusted formula. Non-residential customers are charged based upon the number of fixture units by using a conversion factor that equates 20 fixture units to one EDU.

The City has incurred major costs over the last ten years to upgrade and expand facilities and will continue to incur additional costs to comply with EPA mandates to meet discharge requirements. The capital costs of existing facilities and growth-related portion of future costs of improvements to the City's facilities form the basis of the calculated capacity fee. The capital costs the City has incurred prior to 2006 and the future costs to be incurred over the next ten years were reviewed. The projects associated with these capital costs were examined and the net capacity available from these projects was determined in order to derive the capacity fee. These projects include sewer mains, pumping stations, treatment plant upgrades, outfall costs etc. The resultant full-cost-recovery capacity fee is \$3,916 per EDU.

Implementation of the higher capacity fee would result in additional capacity fee revenue. Since these additional dollars would replace funds that would otherwise be supplied by current system users, and assuming the increase in cost per EDU does not result in a reduction in the number of EDU's sold, the funds from current system users could be utilized to reduce the magnitude of future capital replacement borrowings, offset operations and maintenance expenses, augment the rate stabilization fund, or for other appropriate purposes.

### *1.6.5 Base Charge Options*

One of the objectives of this study was a review of alternative methods for allocating cost to be recovered through the monthly customer base charge. It is well accepted to incorporate a fixed component into the utility rate structure. Since most of the utility's costs are fixed, over the short term, revenue from the fixed component, or Base Charge, promotes revenue stability which is critical to a strong financial position. This base charge is currently set to recover annual administrative costs from the Muni system. However, the City wanted to investigate alternatives for allocating costs to an account-based functional parameter, in addition to flow, TSS, and COD. Then, a base charge unit cost could be calculated by dividing this account-based allocation by the total number of accounts in the City wastewater system.

RFC identified five specific types of costs that may be equitably allocated on an account basis and recovered through a customer base charge. These types of costs include:

- Meter reading, billing, and customer service costs;
- Administrative and General costs;
- Inflow and infiltration costs;
- Sewer lateral maintenance costs; and
- Debt Service costs.

These types of costs were chosen because all, or a portion of them, are more closely related to the number of system accounts than they are to system flow or loadings. Our analysis looked at historical Muni and Metro system operating costs and allocated them among flow, TSS, COD, and account-based functional parameters. The analysis showed that a reasonable allocation of these costs could easily justify the current level of base charge in the City system, currently \$11.32 per account per month. Allocation of cost for base charge recovery is presented in more detail in Section 5.

It was determined that since the SFR class represents over 80% of overall system accounts, this type of account-based allocation would disproportionately impact SFR users. In addition, the SWRCB guidance does not explicitly allow for cost allocation to functional parameters other than flow, TSS, and COD. Under SWRCB guidance, RFC believes the existing methodology for determination of the base fee is appropriate. For these reasons, the City has decided to continue with its existing methodology for development of the customer base charge.

Programmed Base Charge

User Class Description	Unit Rates Flow \$/hcf (WW)	Unit Rates TSS \$/lb	Unit Rates COD \$/lb	Total Usage \$/hcf	Base Fee Current \$/mo	Base Fee Charged \$/mo
Single Family Residential	2.06485	0.30491	0.12435		11.32	12.31
Multiple Family Residential	2.88693	0.42630	0.17386		11.32	12.31
Commercial/Industrial	2.97458	0.43924	0.17914		11.32	12.31
Large Industrial	3.07361	0.45387	0.18510		11.32	12.31
Contract Services (Navy)	3.07361	0.45387	0.18510		11.32	12.31

User Class Description	Unit Rates Flow \$/hcf of water	Unit Rates TSS \$/hcf of water	Unit Rates COD \$/hcf of water	Total Usage \$/hcf of water	Base Fee Current \$/mo	Base Fee Charged \$/mo
Single Family Residential	1.96160	0.50585	0.37209	2.840	11.32	12.31
Multiple Family Residential	2.74259	0.70725	0.52023	3.970	11.32	12.31

	<u>Use</u>	<u>Existing Base</u>	<u>Existing Rate</u>	<u>Existing Bill</u>	<u>Proposed Base</u>	<u>Proposed Rate</u>	<u>Proposed Bill</u>	<u>% Chg</u>
SFR Impacts	0	\$11.32	\$2.889	\$11.32	\$12.31	\$2.840	\$12.31	8.7%
	2			\$17.10			\$17.71	3.6%
	4			\$22.88			\$23.10	1.0%
	6			\$28.65			\$28.50	-0.5%
	8			\$34.43			\$33.89	-1.6%
	10			\$40.21			\$39.29	-2.3%
	12			\$45.99			\$44.69	-2.8%
	14			\$51.77			\$50.08	-3.3%
	16			\$51.77			\$55.48	7.2%
	18			\$51.77			\$60.87	17.6%
	20			\$51.77			\$66.27	28.0%
	25			\$51.77			\$69.11	33.5%
	30			\$51.77			\$69.11	33.5%
	40			\$51.77			\$69.11	33.5%
	50			\$51.77			\$69.11	33.5%
MFR Impacts	100	\$11.32	3.721	\$364.82	\$12.31	3.970	\$389.46	6.8%
	250			\$895.06			\$955.19	6.7%
	500			\$1,778.80			\$1,898.06	6.7%
	1000			\$3,546.27			\$3,783.81	6.7%
Commercial/Industrial	base			\$11.32			\$12.31	8.7%
	flow			\$2.753			\$2.975	8.0%
	TSS			\$0.429			\$0.439	2.3%
	COD			\$0.154			\$0.179	16.0%
Large Commercial/Industrial, Contract Customers, and Hauled Waste	flow			\$2.753			\$3.074	11.6%
	TSS			\$0.429			\$0.454	5.7%
	COD			\$0.154			\$0.185	19.9%

# *City of San Diego, California*



Final Draft

## WATER COST OF SERVICE RATE STUDY

*Prepared By*

**RFC**

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CONSULTANTS, INC.

*November 17, 2006*



## SECTION 1: EXECUTIVE SUMMARY

The City of San Diego (City) wished to conduct a comprehensive water cost of service and rate design study (Study) that included a review of revenue requirements, user classifications, costs of service, and the design of a system of user charge alternatives for the City's water service. In addition, the City also desired a review of its water capacity fees. This report documents the results of the Study, and suggests changes to user classifications, cost allocations and capacity charges which will serve to increase equity in the apportionment of costs during Fiscal Year 2008 and beyond.

The focus of this Study is primarily on the City's retail water service. The specific objective of this Study is to develop cost of service water rates that charge customers in proportion to the cost of serving them. The elements of this study include:

- Review of the costs of providing water procurement, treatment, and distribution to the City's users.
- Determination of the cost to provide service to the City's retail service area.
- Allocation of the cost of service to the water parameters of Base, Maximum Day, Maximum Hour, Meters and Services, Billing and Collecting, and Fire Protection.
- Allocation of parameter costs to the City's retail service user classes.
- Design of an equity enhancing system of charges including water user charges and capacity fees (discussed in the full report).

This section presents the cost of service review findings and suggested changes in summary form.

### 1.1 Water System

This section of the Executive Summary provides a brief description of the water system, a review of the revenue requirements and user classifications, an analysis of cost of service, and the design of water rates.

**System Infrastructure:** The City has managed and operated the water system since 1901 after purchasing the privately owned San Diego Water and Telephone Company. Since then the system has been expanded to supply approximately 270,000 accounts, delivering approximately 240,000 acre-feet of water per year.

The City system consists of nine raw water storage facilities, three water treatment plants, 30 treated water storage facilities and over 3,460 miles of water lines. One of the nine raw water storage facilities, Lake Hodges Reservoir, is not currently connected to a treatment plant but does lease part of its storage capacity to neighboring water agencies. The City owns and operates three water treatment plants with a combined current capacity of 291 million gallons per day (MGD). The 30 treated water storage facilities ensure consistent delivery to the 90 different pressure zones with the aid of 49 water pump stations.

While the City has grown, local water sources have remained static. On average, between 6 percent and 10 percent of the City's water supply is derived from local water sources. The balance of the City's water supply is purchased from the San Diego County Water Authority (CWA). These purchases from the CWA include treated water that is delivered to the City's water distribution system and raw water that is transported to the City's water treatment plants.

The City has made a concerted effort to reduce overall consumption and subsequently to limit water purchases from CWA. An aggressive conservation program has resulted in the City saving an estimated 16.5 MGD compared to the usage forecast included in the 1997 Strategic Plan for Water Supply. These efforts, along with proposed projects for cutting edge technologies such as brackish water desalination, are intended to provide the City with a reliable water supply that is less dependent on imports.

**User/Usage Characteristics:** The City has various types of customers, which are displayed in Figure ES-1. As expected, Single Family Residential makes up the bulk of City customers at approximately 80% of the meters. Other Domestic (Multi-Family) is the next largest class with more than 10% of the meters.

Figure ES-1 – Customer Makeup by Meters (as of 7/1/2006)

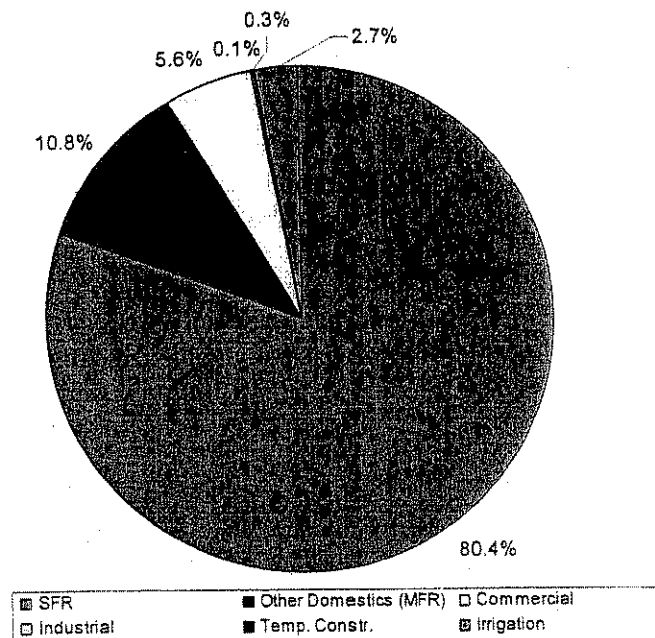


Table ES-1 provides information pertaining to the water usage associated with the various customer types. Single Family Residential, having a tiered rate structure, is further broken down by water usage within each rate block.

Table ES-1 – Projected Annual Water Usage by Class for FY 2008

Usage by Class	HCF	% of Total
SFR Blocks		
0 - 7	15,620,416	17.1%
8 - 14	8,943,800	9.8%
Over 14	9,915,197	10.8%
Total SFR	34,479,413	37.7%
Other Domestic (MFR)	20,519,164	22.4%
Commercial	22,207,400	24.3%
Industrial	1,613,743	1.8%
Temp. Construction	346,667	0.4%
Irrigation	12,294,791	13.4%
Total Non-SFR	56,981,765	62.3%
<b>Total</b>	<b>91,461,178</b>	<b>100.00%</b>

The average SFR usage is 13 HCF per month.

## 1.2 Review of Revenue Requirements

The City's principal source of operating revenues is revenue from rates. The primary sources of funding for capital improvements include water capacity fees, bond proceeds, grants, loans, pay-as-you-go revenues, and interest earnings.

The City estimates overall annual water Operation and Maintenance (O&M) expenditures in the range of \$286.7 - \$306.7 million during the study period from FY 2008 through FY 2011. This includes water purchase costs ranging from \$120 to \$124 million for the same period. Existing debt service on outstanding revenue bonds requires annual payments in the range of \$52 to \$56 million. For purposes of this analysis, the City is expected to issue additional debt of \$538 million in FY 2008 and FY 2010 combined, which will add \$23 million in annual debt service by FY 2011. The proceeds from these revenue bond issues will help finance the water Capital Improvement Program (CIP) estimated at approximately \$600 million for the study period.

The total FY 2008 revenue requirements from the City's retail users—which is generated by totaling O&M, debt service, and cash-financed capital projects and deducting any revenue from other non-rate sources—is estimated to be \$287.4 million, of which approximately \$217.6 million are operating costs. The remaining \$69.8 million are capital-related costs related to debt service and cash-financed capital projects. In order to meet projected revenue requirements and to maintain desired operating funds, the following annual revenue adjustments are recommended. These revenue requirements are used to develop the fixed meter charges and commodity rates in a manner consistent with cost of service principles.

FY 2008	FY 2009	FY 2010	FY 2011
6.5%	6.5%	6.5%	6.5%

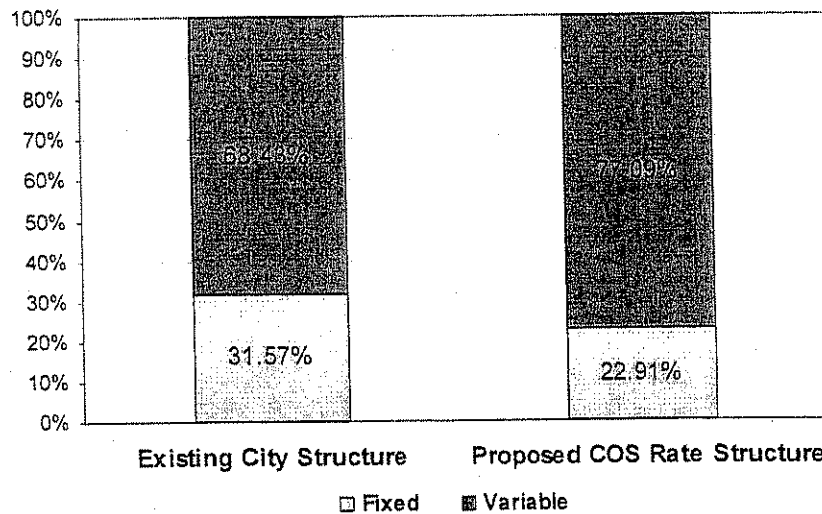
### 1.3 Cost of Service

Cost of service (COS) is a methodical process by which revenue requirements are used to generate a system of fair and equitable costs in proportion to the service received for each user class. The cost of service allocations conducted in this study are based on the base-extra capacity method endorsed by the American Water Works Association (AWWA), a nationally recognized industry group. The other method endorsed by the AWWA, the commodity-demand method, is more suitable for agencies with a number of large wholesale customers. Under the base-extra capacity method, revenue requirements are allocated to the different user classes proportionate to their use of the water system. Allocations are based on average day (base), maximum day peak (Max Day) usage, maximum hour peak (Max Hour) usage, meters and services, billing and collection, and fire protection. Use of this methodology results in an AWWA accepted cost distribution amongst customer classes and a means of calculating and designing rates to proportionately recover those costs.

There is some flexibility in the design of the rate structure to meet the City's pricing objectives while being consistent with cost of service principles. In order to meet the City's pricing objective of revenue stability and to prevent the percentage of fixed revenue from dropping to an undesirable level, capital costs related to peaking capacity were allocated to the meter charge component of the monthly fixed charge. These costs represent the standby costs related to providing peaking capacity in the system. This practice is consistent with cost of service principles and accepted rate setting methodologies. The City's projected fixed revenue for FY 2008 under existing rate structure is approximately \$90.7 million. Under the proposed COS-based rate structure, the fixed revenue is projected to be \$65.8 million.

There are positives and negatives associated with the decrease in fixed revenue. Typically, a larger percentage of fixed rate revenue results in greater revenue stability since a greater percentage of total revenues are not influenced by fluctuations in consumption due to the weather. At the same time, the decrease in fixed revenue will improve equitability concerning cost recovery in that users who use limited amounts of water, and therefore place smaller demands on the system, will pay lower bills. Figure ES-2 reflects the percentage breakdown of fixed and variable revenue under City and the proposed COS rates for FY 2008. The remaining years of the study should be consistent with these percentages. Any changes in consumption patterns could potentially impact the rate revenue composition, but these deviations would most likely be negligible with respect to revenue stability.

Figure ES-2 – Rate Revenue Composition FY 2008



## 1.4 Rate Design

The City's water rates, effective as of July 1, 2006, include fixed service charges and water commodity rates as shown in Table ES-2. The service charges are consistent across all user classes and vary by meter size. Service charges range from \$15.87 per month for a 3/4 inch meter which is typically used by Single Family Residential (SFR, also referred to as Single Family Domestic by the City) customers to \$6,514.14 per month for a 16 inch meter used by large industrial or wholesale customers.

The City has two main user classes: Single Family Residential, and all remaining customers. The commodity rates vary by user class. SFR Customers are billed on a three-block increasing rate structure. The remaining customers are charged a uniform rate of \$2.003 per hundred cubic feet (HCF) of water used. California-American Water Company (Cal-Am) and certain Agricultural customers have contractually negotiated rates which will not be reviewed under the scope of this study.

The rates presented in this Study incorporate AWWA recommended methodologies adapted to meet the City's specific characteristics and provide for a system of user charges that will enhance the proportionate recovery of costs from the various user classes. Rates are designed to meet the City's pricing objectives consistent with cost of service principles.

## 1.5 Study Recommendations

This section of the Executive Summary outlines our observations and suggestions with respect to changes which will enhance equity in the apportionment and recovery of costs. These changes include modifications to user classifications, cost allocations, and water rates.

### 1.5.1 Optional User Classification

The City's existing user classification scheme is adequate to support a rate structure that fairly and equitably recovers costs. However, the City may wish to consider establishing the following user classes based on their peaking characteristics:

- SFR
- Other Domestic (Multi-Family)
- Commercial and Industrial
- Irrigation and Construction

These customers classes can then be charged unique cost-of-service based commodity rates that more accurately reflect and recover the cost of serving these customer classes.

### 1.5.2 Rate Design Changes

Raftelis Financial Consultants (RFC) suggests the continued use of a rate structure that includes both a fixed monthly service charge and a variable water usage charge. The proposed COS rates have been designed to fairly and equitably recover the costs of providing water service to each customer class in proportion to their use of the water system and are consistent with the requirements of Proposition 218.

**Service Charge:** RFC suggests that the City continue to utilize a monthly service charge which is consistent for all users of similar sized meters. The cost elements to be recovered in the service charge include costs based on capacity such as:

- Maintenance of meters and services
- The portion of capital costs allocated to provide peaking capacity
- Public fire protection (hydrants)

and costs that are independent of meter size such as:

- Meter reading
- Customer billing and collection

The service charges for larger meters currently used by the City are higher than those derived from the application of industry standards. RFC therefore suggests that the City consider revising service charges to more proportionately recover its costs of providing service. A list of the City's projected <sup>1</sup>2008 rates and alternative COS service charges is shown in Table ES-2. The reduced revenue from service charges results in slightly higher commodity rates to maintain full cost recovery. Use of proposed COS based service charges would result in a reduced bill for some Single Family Residential (SFR) Customers, which would benefit low volume water users.

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<sup>1</sup> The projected City rates for 2008 were calculated by applying the annual rate increase of 6.5% for FY 2008 uniformly across the City's existing FY 2007 rates.

Table ES-2 - Rate Alternatives

Service Charge						
Meter Size inches	2007 Existing \$/month	2008 City \$/month	2008 Proposed \$/month	2009 Proposed \$/month	2010 Proposed \$/month	2011 Proposed \$/month
5/8	15.87	16.90	15.09	16.07	17.12	18.23
3/4	15.87	16.90	15.09	16.07	17.12	18.23
1	17.11	18.22	23.37	24.89	26.51	28.23
1 1/2	75.41	80.31	42.30	45.05	47.98	51.10
2	116.24	123.80	65.97	70.26	74.82	79.69
3	414.73	441.69	121.58	129.48	137.90	146.86
4	692.00	736.98	200.85	213.91	227.81	242.62
6	1,542.72	1,643.00	397.26	423.08	450.58	479.87
8	2,081.78	2,217.10	633.89	675.09	718.97	765.71
10	2,793.63	2,975.22	910.75	969.95	1,033.00	1,100.14
12	3,892.44	4,145.45	1,698.75	1,809.17	1,926.76	2,052.00
16	6,514.14	6,937.56	2,961.20	3,153.68	3,358.67	3,576.98

Commodity Rate						
Customer Class	2007 Existing \$/HCF	2008 City \$/HCF	2008 Proposed \$/HCF	2009 Proposed \$/HCF	2010 Proposed \$/HCF	2011 Proposed \$/HCF
<u>SFR</u>						
0 - 7	1.731	1.844	2.264	2.411	2.568	2.735
8 - 14	2.163	2.304	2.429	2.587	2.755	2.934
Over 14	2.372	2.526	2.689	2.864	3.050	3.248
<u>General Service</u>						
Other Domestic (MFR)	2.003	2.133	2.428	2.586	2.754	2.933
Commercial & Industrial	2.003	2.133	2.352	2.505	2.668	2.841
Temp. Constr. & Irrigation	2.003	2.133	2.474	2.634	2.806	2.988

**Commodity Rates:** The costs of water service not recovered through the service charges are recovered in the commodity rates. RFC suggests the City consider implementation of commodity based rates for Single-Family Residential; Other Domestic; Commercial and Industrial; and Irrigation and Construction customer classes. Table ES-2 presents a summary of the City's projected 2008 and alternative rate schedules for FY 2008 and beyond.

**Single-Family Residential Commodity Rate:** Since SFR is more homogenous than other customer classes, a tiered rate structure that equitably recovers costs of providing service and promoting conservation can be designed relatively easily. RFC suggests that the City continue utilizing its tiered rate structure for SFR customers.

**All Other Customers' Commodity Rates:** For Other Domestic; Commercial and Industrial; and Irrigation & Construction customer classes, RFC suggests that the City implement the different class-based uniform commodity rates shown in Table ES-2. These proposed rates reflect the estimated peaking demands of each class and provide a greater correlation between costs and revenues.

### 1.5.3 Rate Impact

The main objective of this Study is to present options that will result in a proportionate allocation of costs to all user classes in proportion to the costs of serving these customers. The suggested revisions to service charges and commodity rates are designed to meet that objective.

The cost of service analysis indicates that under the current (2007) system of rates and charges, some users have been paying less for their proportionate demand for water services while others have been contributing more. However, the differences between revenue and cost are small and suggest that overall costs are being recovered in an equitable manner among customer classes.

This study reassigns revenue requirements among the various user classes to calculate the proposed COS rates. Table ES-3 presents a comparison of the distribution of projected revenue (FY 2008) and cost among customer classes. As you can see, revenues by class closely match costs by class. The biggest difference between revenue and cost is in the SFR class where 42.1 percent of revenue and 43.9 percent of costs are contributed by single family users. Table ES-3 indicates that based on COS, 1.8 percent more revenue should be recovered from SFR customers than under current rates. Less revenue should be recovered from other domestics, commercial and temporary construction customers.

*Table ES-3 Projected Cost Distribution vs. Revenue FY 2008*

Line No.	Customer Class	Revenue Distribution	Cost Distribution	Difference
		<u>Under Existing Rate Structure</u>	<u>Under Proposed Rates</u>	
1	SFR	42.1%	43.9%	1.8%
2	Other Domestic (MFR)	21.8%	21.1%	-0.7%
3	Commercial	21.6%	20.8%	-0.8%
4	Industrial	1.4%	1.4%	0.0%
5	Temp. Constr.	0.8%	0.5%	-0.2%
6	Irrigation	12.3%	12.2%	0.0%
7	Total	100%	100%	0.0%

The impacts discussed in this paragraph compare rates under the City 2008 and the proposed COS based rate structures. Under the proposed COS-based rates, most large volume SFR users will receive higher bills, while most low volume users will experience a reduction in monthly bills. Higher volume SFR users will experience these increases due to the higher usage rates that accompany and offset reduced service charges. At the same time, COS rates will encourage conservation and provide low-volume



users with material rate relief. General Service customers will, depending on relative levels of water usage, receive bills which are higher, lower, or about the same as under the 2007 rate structure due in large part to reductions in the meter based service charge. While the suggested changes lead to increases in water bills for some large volume users and decreases for others, they result in a cost recovery that is proportionate to use.

As stated, different customer classes will be impacted by the rate adjustments differently. An analysis of the City's customer meter size and water usage characteristics provides guidance in understanding the impact of the rate adjustments.

Table ES-4 below shows the monthly bills given varying levels of usage for the relevant customer classes under the four different scenarios: 2007 Existing, 2008 City, and 2008-2011 Proposed COS. User classes with identical rates were grouped together.

*Table ES-4 – Monthly Bill Calculations*

	FY 07	FY 08	FY 08	FY 09	FY 10	FY 11
SFR - 3/4"	Existing	City	Proposed	Proposed	Proposed	Proposed
HCF/Month	\$/Mo.	\$/Mo.	\$/Mo.	\$/Mo.	\$/Mo.	\$/Mo.
2	19.33	20.59	19.62	20.89	22.25	23.70
4	22.79	24.28	24.15	25.72	27.39	29.17
6	26.26	27.96	28.67	30.54	32.52	34.64
8	30.15	32.11	33.37	35.54	37.85	40.31
10	34.48	36.72	38.23	40.71	43.36	46.17
12	38.80	41.32	43.08	45.88	48.87	52.04
13*	40.97	43.63	45.51	48.47	51.62	54.98
14	43.13	45.93	47.94	51.06	54.38	57.91
16	47.87	50.98	53.32	56.78	60.48	64.41
18	52.62	56.04	58.70	62.51	66.58	70.90
20	57.36	61.09	64.08	68.24	72.68	77.40

\*Average Usage

The median monthly household income in the City is \$5,173 (annual income of \$62,085) as of 2005<sup>2</sup>. A \$45.51 water bill—the SFR bill assuming average usage and COS FY 08 rates—represents less than 1 percent of monthly median household income. By EPA guidelines, bills of less than two percent (2%) of median housing income are deemed affordable.

<sup>2</sup> [http://www.sandag.org/resources/demographics\\_and\\_other\\_data/demographics/fastfacts/sand.htm](http://www.sandag.org/resources/demographics_and_other_data/demographics/fastfacts/sand.htm)

Table ES-4 – Monthly Bill Calculations (cont.)

Other Domestic (MFR) 3/4" HCF/Month	FY 07 Existing \$/Mo.	FY 08 City \$/Mo.	FY 08 Proposed \$/Mo.	FY 09 Proposed \$/Mo.	FY 10 Proposed \$/Mo.	FY 11 Proposed \$/Mo.
20	55.93	59.57	63.65	67.79	72.19	76.89
40	95.99	102.23	112.21	119.51	127.27	135.55
60	136.05	144.89	160.77	171.22	182.35	194.21
80	176.11	187.56	209.33	222.94	237.43	252.87
100	216.17	230.22	257.90	274.66	292.51	311.53
120	256.23	272.88	306.46	326.38	347.59	370.18
140	296.29	315.55	355.02	378.09	402.67	428.84
160	336.35	358.21	403.58	429.81	457.75	487.50
180	376.41	400.88	452.14	481.53	512.83	546.16
200	416.47	443.54	500.70	533.25	567.91	604.82

Commercial/ Industrial - 1 1/2" HCF/Month	FY 07 Existing \$/Mo.	FY 08 City \$/Mo.	FY 08 Proposed \$/Mo.	FY 09 Proposed \$/Mo.	FY 10 Proposed \$/Mo.	FY 11 Proposed \$/Mo.
50	175.56	186.97	159.90	170.29	181.36	193.15
100	275.71	293.63	277.49	295.53	314.74	335.20
150	375.86	400.29	395.09	420.77	448.12	477.25
200	476.01	506.95	512.68	546.01	581.50	619.30
250	576.16	613.61	630.28	671.25	714.88	761.34
300	676.31	720.27	747.87	796.49	848.26	903.39
350	776.46	826.93	865.47	921.73	981.64	1,045.44
400	876.61	933.59	983.07	1,046.96	1,115.02	1,187.49
450	976.76	1,040.25	1,100.66	1,172.20	1,248.40	1,329.54
500	1,076.91	1,146.91	1,218.26	1,297.44	1,381.78	1,471.59

Temp. Const / Irrigation - 2" HCF/Month	FY 07 Existing \$/Mo.	FY 08 City \$/Mo.	FY 08 Proposed \$/Mo.	FY 09 Proposed \$/Mo.	FY 10 Proposed \$/Mo.	FY 11 Proposed \$/Mo.
200	516.84	550.43	560.68	597.13	635.94	677.28
400	917.44	977.07	1,055.39	1,123.99	1,197.05	1,274.86
600	1,318.04	1,403.71	1,550.10	1,650.86	1,758.17	1,872.45
800	1,718.64	1,830.35	2,044.82	2,177.73	2,319.28	2,470.03
1,000	2,119.24	2,256.99	2,539.53	2,704.60	2,880.40	3,067.62
1,200	2,519.84	2,683.63	3,034.24	3,231.46	3,441.51	3,665.21
1,400	2,920.44	3,110.27	3,528.95	3,758.33	4,002.62	4,262.79
1,600	3,321.04	3,536.91	4,023.66	4,285.20	4,563.74	4,860.38
1,800	3,721.64	3,963.55	4,518.37	4,812.07	5,124.85	5,457.97
2,000	4,122.24	4,390.19	5,013.09	5,338.94	5,685.97	6,055.55



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Office of the Mayor  
City of San Diego

Independent Accountant's Report on Agreed-Upon Procedures  
Applied to Proposed Wastewater Rate Increases

We have applied the procedures enumerated below to the City of San Diego's proposed wastewater rate increases. These procedures, which were agreed to by the City of San Diego were performed solely to assist the City in evaluating the proposed wastewater rate increases.

This engagement to apply agreed-upon procedures was performed in accordance with standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of the specified users of the report. Consequently, we make no representations regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

For purposes of comparisons referenced in this report, amounts are considered to be consistent if the difference between the compared amounts is less than \$1 million and also less than 15%.

BACKGROUND

The Wastewater rate model was developed by outside consultants. The rate model contains projections of future expected revenues, operating costs, and capital costs. The model requires the rate increases to be sufficient to cover net operating costs and 20% of annual capital costs while not violating certain constraints. The model's constraints include maintaining \$10 million in unrestricted, undesignated equity and maintaining a debt coverage ratio of at least 125% through fiscal year ending June 30, 2017. The model projects the following rate increases beginning:

May 1, 2007	8.75%
May 1, 2008	8.75%
May 1, 2009	7%
May 1, 2010	7%

PROCEDURES PERFORMED

The procedures performed and the results of those procedures were as follows:

1. We agreed the beginning unrestricted, undesignated equity balance at June 30, 2006 to unaudited accounting system reports.

Results: The unaudited accounting system reports supported the amounts included in the rate model.

2. The rate model projects revenues based on historical trends and projections of future demand. The rate model includes the following revenue projections (in thousands):

	Fiscal Year Ending June 30,				
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Service Charge Revenues	\$ 238,538	261,769	293,274	316,409	337,207
Sewage Treatment Plant Services	70,389	73,916	77,518	81,142	84,705
Interest Earnings	3,963	4,867	5,358	6,134	6,482
Capacity Charge	14,984	15,139	15,294	15,450	15,607
Other Revenue	<u>17,507</u>	<u>10,794</u>	<u>11,093</u>	<u>11,404</u>	<u>11,728</u>
	<u>\$ 345,381</u>	<u>366,485</u>	<u>402,537</u>	<u>430,539</u>	<u>455,729</u>

- We agreed the 2003 to 2006 revenues to unaudited accounting system reports. These revenues are used in the model to calculate historical trends.

Results: For the years ended June 30, 2003 through 2006, the revenues are consistent with unaudited accounting system reports.

- We agreed the 2007 revenue amounts to the 2007 Annual Budget.

Results: The 2007 Annual Budget is consistent with the projected revenues used in the rate model calculation.

- For *Service Charge Revenues*, we analytically tested the projected revenues for the years ending June 30, 2007 through 2011 by calculating revenues as a percentage of the sewer population as projected by San Diego Association of Governments. We also reviewed Service Charge Revenues by comparing future increases to historical increases.

Results: Projected revenues as a percentage of the population are consistent with historical years. Additionally, projected revenues, excluding inflation and projected rate increases, are consistent with historical revenues.

- For *Interest Income*, we calculated the rate of return using unaudited accounting system reports.

Results: The projected rate of return is consistent with current market interest rates.

- For *Sewage Treatment Plant Services*, *Capacity Charges*, and *Other Revenues* we compared each projected year to the prior year, beginning with the fiscal year ended June 30, 2005.

Results: Projected revenues did not significantly vary from prior year data except for Other Revenues during 2007 to 2008. This is a result of a one-time refund to the Wastewater Department from the Motive Equipment Fund. The refund is attributed to the Wastewater Department's accumulation of funds in the Motive Equipment Fund which exceeds projected fleet vehicle requirements in operations over a 30-year period. The action is currently in the process of being approved by City Council.

3. The rate model projects other sources of funding based on long-term budgeting expectations. The rate model includes the following projections of other sources (in thousands):

	For the years ended June 30,				
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Bond Proceeds	\$ 199,345	80,270	95,590	148,380	147,534
Other Sources	<u>14,435</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total	<u>\$ 213,780</u>	<u>80,270</u>	<u>95,590</u>	<u>148,380</u>	<u>147,534</u>

- *Bond Proceeds* are issued to fund 80% of expected capital project expenditures. Wastewater revenues are used to fund the remaining 20% of capital projects. We recalculated 80% of the capital project expenditures to determine if the amount of bond proceeds is accurate.

Results: Bond proceeds reported in 2007 are equal to 60% of eligible capital project expenditures, a reimbursement of 2007 eligible capital project expenditures, and \$152 million of proceeds to be used to refund outstanding debt. Bond proceeds reported in 2008 through 2011 are consistent with 80% of eligible capital project expenditures.

- We inquired about significant changes in *Other Sources*.

Results: The \$14 million of Other Sources in 2007 represents known grant funding in 2007 that is unknown for future years.

4. The rate model projects operating expenses based on historical trends and projections of future demand. The rate model includes the following expense projections:

	Fiscal Year Ending June 30,				
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Debt Service	\$ 95,947	99,248	105,747	113,477	125,492
Operating & Maintenance	<u>245,158</u>	<u>247,709</u>	<u>265,865</u>	<u>281,359</u>	<u>292,308</u>
	<u>\$ 341,105</u>	<u>346,957</u>	<u>371,612</u>	<u>394,836</u>	<u>417,800</u>

- We agreed the 2003 to 2006 expenditures to unaudited accounting system reports. These expenditures are used in the model to calculate historical trends.

Results: For the years ended June 30, 2003 through 2006, expenditures per the unaudited accounting system reports are consistent with expenditures in the rate model.

- We agreed the 2007 expenditure amounts to the 2007 Annual Budget.

Results: The 2007 expenditures per the model are consistent with the approved expenses in the 2007 Annual Budget.

- For *Operating & Maintenance Expenditures* we compared each projected year to the prior year starting with the fiscal year ended June 30, 2005. Operating and maintenance expenses did not increase by more than 15% in any year and are consistent with historical amounts. We obtained a detailed listing of what makes up the operating and maintenance expense amounts. For significant fluctuations between fiscal years, we obtained an explanation from management.

Results: The major changes in Operating & Maintenance Expenditures are as follows:

- Increase in Pension Contribution – We agreed the increase to projections provided by the Office of the Mayor.
- Increase in Retirement Health Benefits – We agreed the increase to projections provided by the Office of the Mayor.
- Increase in General Government Services – We agreed the increase to detailed reports of the General Governmental Service Allocation.
- Decrease in use of Service Level Agreements – We agreed the decrease to the Mayor's response to the Grand Jury findings.

- For *Operating & Maintenance Expenditures*, we calculated expenditures as a percentage of flow as reported and projected by the San Diego Association of Governments for both historical and future years.

The results are as follows:

	For the years ended June 30,				
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Ratio of Flow to Operating & Maintenance Expenditures	0.08%	0.08%	0.07%	0.07%	0.07%

*Historical Average for 2003 - 2006 = 0.08%*

- For *Debt Service Expenditures*, we agreed principal and interest payments to bond maturity schedules on outstanding debt. We also agreed debt service payments to the City's bond model that projects debt service on bonds that have not yet been issued.

Results: No exceptions were noted.

5. The rate model projects capital expenditures based on specific project start dates and cost estimates. The capital project expenditures include a 3.5% contingency cost and an inflation factor of 4%. We compared the capital project expenditures in the rate model to the City's Capital Improvement Budget.

Results: The capital improvement budget included in the 2007-2011 annual budget report totals \$979 million. The capital improvement expenses from 2007-2011 in the rate model total \$643 million. The variance of \$336 million is mainly attributed to management's decision to schedule certain projects in later years than previously budgeted for in the capital projects budget. The modified projects are as follows:

<u>Project Number</u>	<u>Project Name</u>
44-001.0	Annual Allocation - Sewer Main Replacements
46-194.0	Annual Allocation - Trunk Sewer Rehabilitations
46-206.0	Annual Allocation - Accelerated Projects
40-933.0	Annual Allocation - MWWWD Trunk Sewers
45-940.0	Wet Weather Storage Facility
42-933.0	NCWRP - Ultrafiltration and EDR Upgrade
41-933.0	Pump Station 2 Screens
42-930.0	SBWRP Demineralization Phase 1 and 2
46-502.0	Pooled Contingency
46-505.0	Annual Allocation - Unscheduled Projects

\* \* \* \* \*

We were not engaged to, and did not, perform an audit, the objective of which would be the expression of an opinion on the subject matter. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the use of the City of San Diego, California and is not intended to be and should not be used by those who have not agreed to the procedures and taken responsibility for the sufficiency of the procedures for their purposes.

*Mayer Hoffman Melara P.C.*

Irvine, California  
November 17, 2006





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Office of the Mayor  
City of San Diego

Independent Accountant's Report on Agreed-Upon Procedures  
Applied to Proposed Water Rate Increases

We have applied the procedures enumerated below to the City of San Diego's proposed water rate increases. These procedures, which were agreed to by the City of San Diego were performed solely to assist the City in evaluating the proposed water rate increases.

This engagement to apply agreed-upon procedures was performed in accordance with standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of the specified users of the report. Consequently, we make no representations regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

For purposes of comparisons referenced in this report, amounts are considered to be consistent if the difference between the compared amounts is less than \$1 million and also less than 15%.

BACKGROUND

The Water rate model was originally developed by outside consultants and updated and modified by the City's Water Department personnel. The rate model contains projections of future expected revenues, operating costs, and capital costs. The model requires the rate increases to be sufficient to cover net operating costs and 20% of annual capital costs while not violating certain constraints. The model's constraints include maintaining \$10 million in unrestricted, undesignated equity and maintaining a debt coverage ratio of at least 150%. The model projects the following rate increases:

Fiscal year ending June 30, 2008	6.5%
Fiscal year ending June 30, 2009	6.5%
Fiscal year ending June 30, 2010	6.5%
Fiscal year ending June 30, 2011	6.5%

PROCEDURES PERFORMED

The procedures performed and the results of those procedures were as follows:

1. We agreed the beginning unrestricted, undesignated equity balance at June 30, 2006 to unaudited accounting system reports.

Results: The unaudited accounting system reports supported the amounts included in the rate model.

2. The rate model projects revenues based on historical trends and projections of future demand. The rate model includes the following revenue projections (in thousands):

	Fiscal Year Ending June 30,				
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Water sales	\$279,832	314,799	346,549	376,356	407,926
Capacity charges	12,457	12,152	12,289	12,394	12,250
Rental income	4,252	4,333	4,416	4,499	4,585
Interest income	8,318	20,804	13,083	21,908	15,210
Charges to other funds	10,762	10,967	11,175	11,388	11,604
Other revenues	<u>9,746</u>	<u>4,609</u>	<u>4,696</u>	<u>4,784</u>	<u>4,875</u>
Total projected revenues	<u>\$325,367</u>	<u>367,664</u>	<u>392,208</u>	<u>431,329</u>	<u>456,450</u>

- We agreed the 2003 to 2006 revenues to unaudited accounting system reports. These revenues are used in the model to calculate historical trends.

Results: For the years ended June 30, 2003 through 2006, the revenues are consistent with unaudited accounting system reports.

- We agreed the 2007 amounts to the 2007 Annual Budget.

Results: The 2007 Annual Budget is consistent with the projected revenues used in the rate model calculation.

- For *Water Sales*, we analytically compared projected revenues for the years ended June 30, 2007 through 2011 to historical revenue trends.

Results: The revenue increases from year to year are consistent with the historical water sales plus increases for water rates.

- For *Interest Income*, we calculated the rate of return using unaudited accounting system reports.

Results: The projected rate of return is consistent with current market interest rates.

- For *Capacity Charges*, *Rental Income*, *Charges to Other Funds*, and *Other Revenues* we compared each projected year to the prior year starting with the fiscal year ended June 30, 2005.

Results: Other revenues decreased significantly from 2007 to 2008 due to known grant funding in 2007 that is unknown for future years. There were no other significant variances from the prior year data that required further investigation.

3. The rate model projects other sources of funding based on long-term budgeting expectations. The rate model includes the following projections of other sources (in thousands):

	Fiscal Year Ending June 30,				
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Bond proceeds	\$ 48,275	237,468	-	207,300	-
Rate stabilization fund transfer	-	1,000	-	-	-
Other sources	<u>3,213</u>	<u>115</u>	<u>115</u>	<u>115</u>	<u>115</u>
Total other sources	<u>\$ 51,488</u>	<u>238,583</u>	<u>115</u>	<u>207,415</u>	<u>115</u>

- Bond proceeds are issued to fund 70% to 80% of expected capital project expenditures. Water revenues are used to fund the other 20% to 30% of capital projects. We recalculated percentage of the capital project expenditures to determine if the amount of bond proceeds is accurate.

Results: Bond proceeds received in 2007 are equal to 70% of the 2007 eligible capital project expenditures plus an additional \$10 million of reimbursements for the prior year's capital projects that were funded by water revenues in excess of the historical 30% goal. Bond proceeds in 2008 are equal to 80% of eligible capital project expenditures for the years 2008 and 2009 combined. Bond proceeds in 2010 are equal to 80% of eligible capital project expenditures for the years 2010 and 2011.

- The rate stabilization fund transfer is a management tool used to smooth changes in water rates. We inquired with management the reason for the rate stabilization transfer in 2008.

Results: The \$1 million rate stabilization transfer in 2008 represents management's intentions to reduce the required rate increase in 2008.

- We inquired about significant changes in Other Sources.

Results: Other Sources includes transfers from the City's Capital Outlay Fund. In 2007, the transfer includes proceeds from the sale of property owned by the Water Department.

4. The rate model projects operating expenses based on historical trends and projections of future demand. The rate model includes the following expense projections:

	Fiscal Year Ending June 30,				
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Operating and maintenance	\$134,278	151,143	157,333	172,632	180,660
Water purchases	125,340	124,956	131,616	131,244	138,591
Transfers to other funds	3,414	4,717	5,614	5,762	5,915
Debt service	42,623	52,822	61,777	72,875	80,677
Other	1,320	6,234	6,518	7,136	7,463
Total operating expenses	<u>\$306,975</u>	<u>339,872</u>	<u>362,858</u>	<u>389,649</u>	<u>413,306</u>

- We agreed the 2003 to 2006 expenses to unaudited accounting system reports. These expenses are used in the model to calculate historical trends.

Results: For the years ended June 30, 2003 through 2006, expenditures per the unaudited accounting system reports are consistent with expenditures in the rate model.

- We agreed the 2007 amounts to the 2007 Annual Budget.

Results: The 2007 expenses per the model are consistent with the approved expenses in the 2007 Annual Budget.

- *Operating and Maintenance Costs* did not increase by more than 15% in any year and is consistent with historical amounts. We obtained a detailed listing of what makes up the operating and maintenance expense number. For significant fluctuations between fiscal years, we obtained an explanation from management.

Results: We noted the following significant fluctuations in the projection:

- Increase in operating and maintenance expenses for new capital projects - Management reviews the capital program to identify when projects will become operational and to identify whether they will require new staff or add/subtract other operating costs. The amounts in the model represent management's expectations.
- Increase in management information systems costs - We compared the amounts in the model to information from the department projecting information system costs.

- Decrease in Service Level Agreement (SLA) costs - As a response to the Grand Jury Report, the Mayor has reduced SLA expenditures.
- Increase in Pension Contribution – We agreed the increase to projections provided by the Office of the Mayor.
- Increase in Retirement Health Benefits – We agreed the increase to projections provided by the Office of the Mayor.
- For *Water Purchases*, we obtained the water rates and charges from the Metropolitan Water District of Southern California ("MWD") and recalculated water purchases in the model based on MWD's water rates.

Results: No exceptions were noted.

- *Transfers to Other Funds* is for the annual General Governmental Services Allocation. This is an allocation of General Fund charges to other funds of the City. In a separate report dated June 30, 2006, we tested the \$3.4 million allocation (2007) to determine if it was equitably charged to the funds of the City. The increase is an estimate based on budgeted cost.

Results: We obtained detailed spreadsheets by department projecting future increases in the General Governmental Services Allocation. We calculated the percentage of the overall increase for the Water Fund and determined that the increase used in the model was correctly calculated.

- For *Debt Service Expenses*, we agreed principal and interest payments to bond maturity schedules on outstanding debt. We also traced debt service expense to the bond model that projects debt service on bonds that have not yet been issued.

Results: No exceptions were noted.

5. The rate model projects capital expenses based on specific project start dates and cost estimates. The capital project expenses include a 5% contingency cost and an inflation factor of 4%. We compared the capital project expenses in the rate model to the City's Capital Improvement Budget.

Results: The capital improvement budget totals \$512,825,516. The capital improvement expenses from 2007-2011 in the rate model totals \$646,946,000. The capital expenditure budget includes both privately funded resources and debt funded expenditures. The rate model only includes debt funded capital expenditures. We agreed the 2007 capital improvement budget to the rate model, which was reduced by private funding.

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We were not engaged to, and did not, perform an audit, the objective of which would be the expression of an opinion on the subject matter. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the use of the City of San Diego, California and is not intended to be and should not be used by those who have not agreed to the procedures and taken responsibility for the sufficiency of the procedures for their purposes.

*Maya Hoffman Melara P.C.*

Irvine, California  
November 17, 2006

## Metropolitan Wastewater Department – FY08-11 CIP Projects

CIP #	CIP TITLE	STATUS	JUSTIFICATION
46-193.0	ANNUAL ALLOCATION - CIP CONTINGENCIES		
45-975.0	ANNUAL ALLOCATION - DEVELOPER PROJECTS	Design and Construct As-Needed	Condition Upgrade or Under Capacity
NEW	ANNUAL ALLOCATION - MUNI FACILITIES CONTROL SYSTEMS UPGRADE	Begin Const. Jul-10	System Operation Upgrade
40-933.0	ANNUAL ALLOCATION - MWWD TRUNK SEWERS	Continuing Program	Consent Decree
46-050.0	ANNUAL ALLOCATION - PIPELINE REHABILITATION	Continuing Program	Consent Decree
41-927.0	ANNUAL ALLOCATION - PS 64, 65, PENASQUITOS & E. MISSION GORGE	Continuing Program	Condition Upgrade
46-505.0	ANNUAL ALLOCATION - UNSCHEDULED PROJECTS	Continuing Program	Condition Upgrade
46-196.6	BALBOA TRUNK SEWER	Design Complete Begin Const. Jul-09	Consent Decree
46-169.0	EAST MISSION GORGE FORCE MAIN REHABILITATIONS	Design In Progress Begin Const. Jul-10	Consent Decree
46-197.9	LAKE MURRAY IN CANYON TRUNK SEWER	Design Complete Begin Const. Jul-09	Consent Decree
46-196.9	MONTEZUMA TRUNK SEWER	Begin Const. Aug-10	Consent Decree
40-930.0	OTAY MESA TRUNK SEWER	Design at 90% Begin Const. Jul-08	Sewer Availability and Capacity
41-940.0	PUMP STATION 64 FIBER OPTIC NETWORK	Begin Const. Sep-08	System Operation Upgrade
41-939.0	PUMP STATION 84 UPGRADE & PUMP STATION 62 ABANDONMENT	Begin Const. Sep-10	Consent Decree
41-929.0	PUMP STATION UPGRADES	Design Complete 4 Phases Begin Const. Jan-08 1st Phase	Consent Decree
46-602.6	SEWER PUMP STATION 79	Begin Const. May-07	Capacity Upgrade
46-197.6	USIU TRUNK SEWER	Design Complete Begin Const. Feb-11	Consent Decree
46-206.0	ANNUAL ALLOCATION - ACCELERATED PROJECTS	Design and Construct As-Needed	Condition Upgrade
44-001.0	ANNUAL ALLOCATION - SEWER MAIN REPLACEMENTS	Continuing Program	Consent Decree
46-106.0	ANNUAL ALLOCATION - SEWER PUMP STATION RESTORATIONS	Continuing Program	Condition Upgrade
46-194.0	ANNUAL ALLOCATION - TRUNK SEWER REHABILITATIONS	Continuing Program	Consent Decree
46-195.6	EAST POINT LOMA TRUNK SEWER	Design Complete Begin Const. Dec-08	Consent Decree
46-205.0	HARBOR DRIVE TRUNK SEWER REPLACEMENT	Design In Progress Begin Const. Jul-10	Consent Decree

40-928.0	SOUTH PACIFIC HIGHWAY TRUNK SEWER	Design In Progress Begin Const. Apr-10	Consent Decree
46-119.0	ANNUAL ALLOCATION - PT. LOMA TREATMENT PLANT & RELATED FACILITIES	Projects are designed and constructed annually.	System Operation Upgrade - This facility requires upgrades to maintain efficient operations.
45-943.0	POINT LOMA - GRIT PROCESSING IMPROVEMENTS	The design will updated in FY08 and construction would be from FY09 to FY15.	System Operation Upgrade - Improvements are needed to reduce operations and maintenance costs and maintain treatment capacity.
46-501.0	POOLED CONTINGENCY		
45-956.0	ANNUAL ALLOCATION - METRO OPERATIONS CENTER	Design and construct as-needed	System Operation Upgrade - This facility requires upgrades to maintain efficient operations.
41-926.0	ANNUAL ALLOCATION - METROPOLITAN SYSTEM PUMP STATIONS	Design and construct as-needed	System Operation Upgrade - This facility requires upgrades to maintain efficient operations.
42-913.0	ANNUAL ALLOCATION-METRO BIOSOLIDS CENTER	Design and construct as-needed	System Operation Upgrade - This facility requires upgrades to maintain efficient operations.
42-926.0	ANNUAL ALLOCATION-NORTH CITY WATER RECLAMATION PLANT	Design and construct as-needed	System Operation Upgrade - This facility requires upgrades to maintain efficient operations.
45-932.0	ANNUAL ALLOCATION-SOUTH BAY WATER RECLAMATION PLANT	Projects are designed and constructed annually.	System Operation Upgrade - This facility requires upgrades to maintain efficient operations.
45-965.0	ENVIRONMENTAL MONITORING & TECH. SERVICES LAB BOAT DOCK	Design complete. Construction in FY08, pending boat channel conveyance	System Operation Upgrade
45-984.0	MBC BIOSOLIDS STORAGE SILOS	In-House Management FY07-11 Design FY08-09 Construction FY10-11	Capacity
45-982.0	MBC CENTRATECOLLECTION UPGRADES	In-House Management FY07-10 Design FY07-08 Construction FY9-10	Capacity & Condition
45-983.0	MBC DEWATERING CENTRIFUGE REPLACEMENT	In-House Management FY07-11 Design FY08-09 Construction FY10-11	Capacity
45-989.0	MBC ODOR CONTROL FACILITY UPGRADES	In-House Management FY07-10 Design FY07-09 Construction FY9-10	Capacity & Regulatory
45-981.0	MBC STANDBY CENTRIFUGE FEED FACILITIES	In-House Management FY07-10 Design FY08-09 Construction FY10-11	Capacity & Condition
45-988.0	MBC WASTEWATER FORCEMAIN EXTENSION	In-House FY07-10 Design FY07-08 Construction FY9-10	Capacity & Condition
45-966.0	METRO FACILITIES CONTROL SYSTEM UPGRADE	Design FY08 Construction FY09-10	System Operation Upgrade
41-944.0	NCWRP - EFFLUENT PUMP STATION UPGRADE	Design FY08 Construction FY08-09	Regulatory/ Capacity
41-942.0	NCWRP - SLUDGE PUMP STATION UPGRADE	Design FY09 Construction FY10-11	Regulatory/ Capacity



45-964.0	NORTH CITY RAW SLUDGE / POINT LOMA CATHODIC PROTECTION	Design FY07 Construction FY08	Condition
42-933.0	NCWRP - PERMANENT ULTRAFILTRATION AND EDR UPGRADE	Design FY09 Construction FY10-11	Regulatory/ Capacity
46-502.0	POOLED CONTINGENCY		
45-915.0	PUMP STATION 2 ONSITE STANDBY POWER	Design FY08 Construction FY08-09	System Operation Upgrade
42-930.0	SBWRP DEMINERALIZATION PHASE 1 & 2	Design FY09 Construction FY11.	Reduce salinity or total dissolved solids levels to required levels
45-961.0	SOUTH METRO SEWER REHABILITATION, PHASE IIIB	Inspection and design FY08.	Condition Upgrade
45-940.0	WET WEATHER STORAGE FACILITY	Feasibility study	Capacity and regulatory.

## Water Department – FY08-11 CIP Projects

CIP #	CIP TITLE	STATUS	JUSTIFICATION
70-910.5	Miramar Pipeline Improvements - Phase III & IV	Monitoring Pipe Lifespan	DHS Requirement
73-083.0	AA - Water Main Replacements(CI)	Construction	DHS Requirement
73-261.7	Alvarado WTP Ph 4 Ozone	Design	DHS Requirement
73-284.0	Miramar Water Treatment Plant - Contract A	Construction	DHS Requirement
73-284.4	Miramar WTP Contract B - Floc/Sedimentation Basins	Design	DHS Requirement
73-284.6	Miramar WTP Contract C - Ozone Equip/Install	Design	DHS Requirement
73-286.6	Otay 2nd Pipeline - Cast Iron Replacement Phase	Design	DHS Requirement
73-328.0	Rancho Bernardo Reservoir Rehabilitation	Design Complete	DHS Requirement
73-342.0	Rancho Penasquitos Pump Station	Design	DHS Requirement
70-953.4	La Jolla Shores Dr. 16" Water Main Repl.	Design	DHS Related Requirement
70-957.0	Harbor Drive Cast Iron Pipeline	Planning	DHS Related Requirement
73-261.3	Alvarado WTP Expansion Phase 2	Construction	DHS Related Requirement
73-261.6	Alvarado WTP Ph 3 Rehab Floc/Sed Basins	Design	DHS Related Requirement
73-261.8	Alvarado WTP Ph 5 Sitework	Planning	DHS Related Requirement
73-261.9	Alvarado WTP - SDFCF 12	Planning	DHS Related Requirement
73-284.3	Miramar WTP SDFCF 24, 25, 26	Planning	DHS Related Requirement
73-284.5	Miramar WTP Contract D - Landscape & Sitework	Planning	DHS Related Requirement
73-285.0	Otay WTP Upgrades Phase 1	Design Complete	EPA Requirement
73-285.2	Otay WTP Upgrades Phase 2 (CLO2)	Design	EPA Requirement
73-286.8	Otay 2nd Pipeline - North Encanto Replacement	Design	DHS Related Requirement
73-331.0	AA - Pooled Contingencies - Water	Annual Allocation	DHS Related Requirement
73-333.0	AA - Air Valve Adjustments	Annual Allocation	DHS Related Requirement
73-343.0	Lower Otay Reservoir - Emergency Outlet Improvmt	Planning	DHS Related Requirement
73-347.0	CIP Program Management	Annual Allocation	DHS Related Requirement
73-355.0	Lindbergh Field 16-inch Cast Iron Replacement	Planning	DHS Related Requirement
73-024.0	AA - Freeway Relocations	Annual Allocation	Projects Required by CALTRANS related to Freeway project
73-028.2	CALTRANS-DUENDA RD-I15	Construction	Projects Required by CALTRANS related to Freeway project
73-028.3	CALTRANS-W.BERNARDO DR-I1	Construction	Projects Required by CALTRANS related to Freeway project
73-028.4	CALTRANS-SR125 - TOLL ROAD	Construction	Projects Required by CALTRANS related to Freeway project
73-028.5	CALTRANS - I905	Construction	Projects Required by CALTRANS related to Freeway project
73-028.8	CALTRANS-Encasement 20 in @ I-15	Construction	Projects Required by CALTRANS related to Freeway project
73-028.9	CALTRANS-Carrol Canyon Bridge	Construction	Projects Required by CALTRANS related to Freeway project
73-314.0	CWA Flow Control & Pump Station 17 (SD 17)	Planning Complete	Grant Funded
73-910.1	Fault Crossing Retrofits to Large Pipelines	Design	Grant Funded
73-910.2	Point Loma Pipeline - New Movement Resist.	Planning	Grant Funded

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73-910.3	Landslide/Liquefaction Pipeline Mitigation	Design	Grant Funded
73-910.4	La Jolla Country Club Reservoir Seismic Upgrade	Planning	Grant Funded
75-931.0	Water Dept. Security Upgrades	Construction	Grant Funded
75-931.1	Water Dept. Security Upgrades - Miramar	Construction	Grant Funded
75-931.2	Water Dept. Security Upgrades - Alvarado	Construction	Grant Funded
75-931.4	Water Dept. Security Upgrades - Regulators	Construction	Grant Funded
75-931.5	Water Dept. Security Upgrades - Reservoirs & Dams	Construction	Grant Funded
75-931.6	Water Dept. Security Upgrades - Encl PS	Construction	Grant Funded
75-931.8	Water Dept. Security Upgrades - Tank Standpipe Res	Construction	Grant Funded
70-959.0	El Capitan Pipeline No. 2	Planning	Operational Requirement of Water System
70-960.0	El Monte Pipeline No. 2	Planning	Operational Requirement of Water System
70-961.0	Kearny Mesa Pipeline Upgrade	Planning	Operational Requirement of Water System
70-963.0	Miramar Service Area Improvements	Planning	Operational Requirement of Water System
70-963.1	Alvarado Service Area Improvements	Planning	Operational Requirement of Water System
70-963.2	Otay Service Area Improvements	Planning	Operational Requirement of Water System
73-083.1	AA - Water Main Replacements(NON CI)	Annual Allocation	Operational Requirement of Water System
73-246.1	Kensington Pressure Regulator	Planning	Operational Requirement of Water System
73-263.0	AA - Water Pump Station Rehabilitations	Annual Allocation	Operational Requirement of Water System
73-263.4	Tierrasanta (Villa Dominique) Pump Station	Planning	Operational Requirement of Water System
73-263.5	Soledad Pump Station Upgrade	Planning	Operational Requirement of Water System
73-263.6	Scripps Miramar Pump Station Upgrade	Planning	Operational Requirement of Water System
73-277.0	AA - Standpipes and Reservoirs	Annual Allocation	Operational Requirement of Water System
73-285.3	Otay WTP Upgrades Phase 3	Planning	Operational Requirement of Water System
73-286.4	Otay 2nd Pipeline - Isolate Service Sweetwater	Design Postponed	Operational Requirement of Water System
73-286.5	Otay 2nd Pipeline - Cathodic Protect Otay Ranch	Design Postponed	Operational Requirement of Water System
73-291.0	Water Reservoir Water Quality - San Vicente	Planning	Operational Requirement of Water System
73-301.0	Serra Mesa Pump Station	Planning	Operational Requirement of Water System
73-309.7	Emerald Hills Standpipe Removal	Planning	Operational Requirement of Water System
73-310.0	AA - Corrosion Control	Annual Allocation	Operational Requirement of Water System
73-317.0	Barrett Reservoir Outlet Tower Upgrade	Design Complete	Operational Requirement of Water System
73-319.0	El Capitan Reservoir Rd Improvements	Design Complete	Operational Requirement of Water System
73-321.0	Morena Reservoir Outlet Tower Upgrade	Planning	Operational Requirement of Water System
73-329.0	Tierrasanta Norte Water Pump Station	Planning	Operational Requirement of Water System
73-346.0	Parkland Pump Station	Planning	Operational Requirement of Water System
73-350.0	Water Flow Meter Installation	Planning	Operational Requirement of Water System
73-361.0	AA - Meter Boxes	Annual Allocation	Operational Requirement of Water System
73-400.4	Pomerado Park Reservoir Upgrade	Planning	Operational Requirement of Water System
73-400.5	Paradise Mesa Standpipe Rehabilitation	Planning	Operational Requirement of Water System

73-400.6	Catalina Standpipe Renovation	Planning	Operational Requirement of Water System
73-400.7	La Jolla View Reservoir	Planning	Operational Requirement of Water System
73-400.8	La Jolla Exchange Place Reservoir	Planning	Operational Requirement of Water System
73-900.0	Annual Allocation - Pressure Reduction Facility	Annual Allocation	Operational Requirement of Water System
74-925.0	AA - Dams and Reservoirs	Annual Allocation	Operational Requirement of Water System
74-925.4	South San Diego Reservoir Upgrade	Planning	Operational Requirement of Water System
74-925.6	San Carlos Reservoir Interior Enhancement	Planning	Operational Requirement of Water System
74-975.5	Lake Hodges Dam Modification	Planning	Operational Requirement of Water System
74-975.7	Morena Dam Grotto	Planning	Operational Requirement of Water System
74-976.0	Miramar Clearwell Improvements	Planning	Operational Requirement of Water System
75-933.0	Barrett Flume Cover	Planning	Operational Requirement of Water System
75-934.0	Outlet Tower Silt Removal and Management	Planning	Operational Requirement of Water System
75-935.4	Penasquitos / Carmel - Study	Planning	Operational Requirement of Water System
75-939.0	South County Raw Water Reservoir Intertie Study	Planning	Operational Requirement of Water System
75-932.0	AA - Groundwater Asset Development Program	Planning	Local Water Supply to meet Long-Range WRP goal
75-932.2	Mission Valley Groundwater Desalination	Planning	Local Water Supply to meet Long-Range WRP goal
75-932.3	Groundwater Studies	Planning	Local Water Supply to meet Long-Range WRP goal
75-932.4	San Pasqual Brackish Groundwtr Desal Demo Ph III	Planning Complete	Local Water Supply to meet Long-Range WRP goal
75-932.5	San Pasqual Groundwater Desalination	Planning	Local Water Supply to meet Long-Range WRP goal
75-932.6	San Pasqual Groundwater Management Plan	Planning	Local Water Supply to meet Long-Range WRP goal
75-932.7	San Diego Formation Desalination	Planning	Local Water Supply to meet Long-Range WRP goal
70-942.0	AA - Pooled Contingencies - RWDS	Annual Allocation	EPA goal of 50% beneficial use of Reclaimed Water by 2010
70-949.0	AA - Reclaimed Water Extension	Annual Allocation	EPA goal of 50% beneficial use of Reclaimed Water by 2010
70-955.3	Pacific Highlands RWP (Participation agreement)	Construction	EPA goal of 50% beneficial use of Reclaimed Water by 2010
70-955.5	Camino Del Sur RW Project- E&CP Road Improvement	Design	EPA goal of 50% beneficial use of Reclaimed Water by 2010
70-955.6	Camino Del Sur RW P/L- Participation Agreement	Construction	EPA goal of 50% beneficial use of Reclaimed Water by 2010